ABSTRACT OF THE INVENTION

A method for producing titanium alloy brazing strips and the resulting brazing strips and/or foils. The method uses a cold-rolling process without heat treating to generate a titanium based multi-layer alloy strip or foil made up of discrete layers of titanium and an additional layer or layers of one or more metals, such as zirconium, nickel and/or copper, for example, or alloys thereof, with the layer of titanium roll bonded without heat treating to the layers of the additional metal(s). The resulting strip or foil can include, for example, Cu/Ti/Cu, Ni/Ti/Ni, Ni/Ti/Cu, Cu/Ni/Ti/Ni/Cu, Ni/Cu/Ti/Cu/Ni, Ni/Cu/Ni/Ti/Ni/Cu/Ni, Ni/Zr/Cu/Ti/Cu/Zr/Ni and Ni/Ti/Cu/Zr/Cu/Ti/Ni among other combinations. The resulting strip or foil can be used for brazing, creating an alloy of the weight percentage of the original materials.